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ABSTRACT

This brief draws on data from the 1980 and 1990 censuses and other sources to profile American Indian demographic trends and educational experiences. Highlights for 1988-90 include the following: (1) the American Indian population reached 1.9 million in 1990, up 38 percent from 1980; (2) the high school dropout rate for American Indians was 35.5 percent, compared to 28.8 percent for all students; (3) 103,000 American Indian students enrolled in higher education, up 11 percent in 2 years; (4) 9 percent of American Indian adults had completed 4 years of college, compared to 20 percent of the total population; (5) over half of American Indian college students were enrolled in 2-year colleges, and almost 75 percent were enrolled in 79 institutions; (6) over half of American Indian college students dropped out during their first year; and (7) American Indians earned less than 1 percent of all degrees awarded and comprised less than 1 percent of all full-time higher education employees. Summaries of the available data are presented for the following areas: (1) demographic trends (population growth and concentration, age, and educational attainment); (2) precollege indicators (elementary and secondary enrollments, at-risk characteristics, public high school graduates, eighth-graders' plans for postsecondary education, and SAT and ACT scores); (3) postsecondary enrollment; (4) financial aid for undergraduate and graduate students; (5) degrees conferred (overall and broken down by type); (6) demographic profile of American Indian doctorates; (7) employment as higher education faculty and administrators; and (8) tribally controlled community colleges. Contains 29 references, 7 tables and figures, and 10 resources for further information. (SV)

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American Indians in Higher Education

Eileen M. O'Brien

Very little is known about the contemporary educational experiences of American Indians, who often are ignored or placed in the category of "other" in most national education research. Although American Indians have a longer history in American education than any other minority group, not much is known about their participation rates and achievement levels, and what is known often is not encouraging. However, over the past three decades, American Indian leaders have made great strides in increasing educational opportunities, brightening a previously bleak picture.

This brief focuses on the demographic trends and educational experiences of American Indians, sets forth implications of these trends for future policy, and discusses key information sources.

HIGHLIGHTS AND IMPLICATIONS

- The 1990 Census reports the American Indian population has now reached 1.9 million, growing at a faster rate (38 percent) than the total population (9 percent) from 1980 to 1990. Yet American Indians represent only 0.8 percent of the total U.S. population.
- In 1988, the high school dropout rate for American Indians was 35.5 percent, compared with 28.8 percent for all students. These high dropout rates indicate that colleges and universities should collaborate with elementary and secondary schools to encourage more Indian students to complete high school and plan for postsecondary education.
- In 1990, a total of 103,000 American Indian students enrolled in higher education, an increase of 11 percent from 1988. However, American Indians still account for less than one percent of all higher education students.
- Nine percent of American Indian adults have completed four years of college, compared with 20 percent of the total population. Yet, the American Indian population is very young, and with their increased access to postsecondary education through tribally controlled community colleges, this is a population that higher education officials would do well to recruit.
- More than half (53 percent) of American Indian students were enrolled in two-year colleges in 1990. Given this, colleges and universities should consider examining their articulation agreements with local two-year colleges to ensure that American Indian students are able to transfer as smoothly as possible.
- American Indian students are concentrated in a small number of institutions: almost 75 percent of American Indian students were enrolled in 79 institutions in 1989. And one 1987 report found that more than 35 percent of all postsecondary institutions had *no* American Indian students enrolled.
  - — A 1989 survey of those institutions serving almost 75 percent of American Indian students found that more than half of those students (53 percent) left after the first year; three out of four did not complete their degrees. This indicates that college and university programs that target American Indian students in the first year are essential, and could dramatically improve their chances of remaining in college.

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- American Indians earn less than one percent of all associate, bachelor's, master's, first professional, and doctoral degrees awarded.
- In 1989, less than one percent of all full-time higher education employees were American Indian, and the vast majority (75 percent) of these were in nonfaculty and nonmanagement positions. In addition, only one in every 344 full-time faculty is American Indian.
- In 1991, an estimated 20 to 30 college presidents were American Indian, and most of these presidents head tribal colleges.
- One major research problem for American Indians is that all too often, they are ignored or included in the category of "other"; therefore, their educational needs and problems are unknown.
  - Researchers should consider oversampling to compensate for this paucity of data and to form a clearer picture of how this small but important population fares in our colleges and universities.
- The second major problem is that studies typically do not break down data on American Indians by tribe, even though differences between tribes are great, or by reservation vs. non-reservation populations.

Introduction

Starting with American Indians' first dealings with the U.S. government, tribal leaders sought education as one of the specific services Indian tribes requested in exchange for their lands. However, the long history of American Indians in formalized U.S. education has tended to stress their assimilation into white Eurocentric culture, and their relinquishing of Indian cultures and languages.

In the past few decades, American Indian educators and advocates have won important victories in their struggle to gain more control over the education of their children and citizenry. However, many of these gains (increased control over local schools, more funds for bilingual education) have occurred at the elementary and secondary levels. American Indian advocates say these advances alone cannot overcome centuries of forced assimilation, as evidenced by the small numbers of American Indians in higher education.

Nevertheless, there are two important signs of change at the postsecondary level. First, over the past three decades, almost two dozen tribes have established tribally controlled community colleges, which focus on integrating tribal languages and history into a traditional college curriculum. Second, enrollments and degrees conferred to American Indians have increased slightly over the past ten years. The question now becomes how to build on these positive trends.

Demographic Trends

The Decennial Census is the best demographic data source on American Indians, specifically for data by tribal affiliation. Yet, data on individual tribes will not be available from the 1990 Census until mid-1993, leading us to rely on 1980 data to analyze certain areas.

POPULATION GROWTH AND CONCENTRATION

- The American Indian[1] population in the United States is now 1.9 million, according to the 1990 Census. The number of American Indians grew 38 percent from 1980 to 1990, compared with a 9-percent increase for the total U.S. population. However, American Indians still represent only .8 percent of the total U.S. population (table 1).
- The American Indian population is highly concentrated in a few states. In 1990, six of every ten American Indians lived in just one of ten states (listed in descending order): Oklahoma, California, Arizona, New Mexico, Alaska, Washington, North Carolina, Texas and New York (figure 1).
- Census data indicate that American Indians continue to move away from reservations: in 1990, 22 percent of the American Indian population lived on reservations, down slightly from 25 percent in 1980.

AGE

- The median age of American Indians in the 1980 census was 23.5 years, compared with an overall median age of 30.0 years for the nation.

EDUCATIONAL ATTAINMENT LEVELS

Data from the 1990 Census show American Indian educational attainment levels rose during the 1980s; but again, data on differences among American Indian tribes are only available from 1980.

- In 1990, 66 percent of American Indians who were 25 years and older were high school graduates, a sizable increase from 56 percent in 1980. However, this percentage is still lower than the rates recorded for the overall population: 75 percent in 1990 and 67 percent in 1980.
- Similarly, the percentage of American Indian adults who had completed four years of college increased slightly from less than 8 percent in 1980 to 9 percent in 1990. Again, the proportions were higher for the total U.S. adult population: 16 percent in 1980 and 20 percent in 1990.
- When data is broken down by tribe — based on 1980 data — different pictures emerge:

Table 1

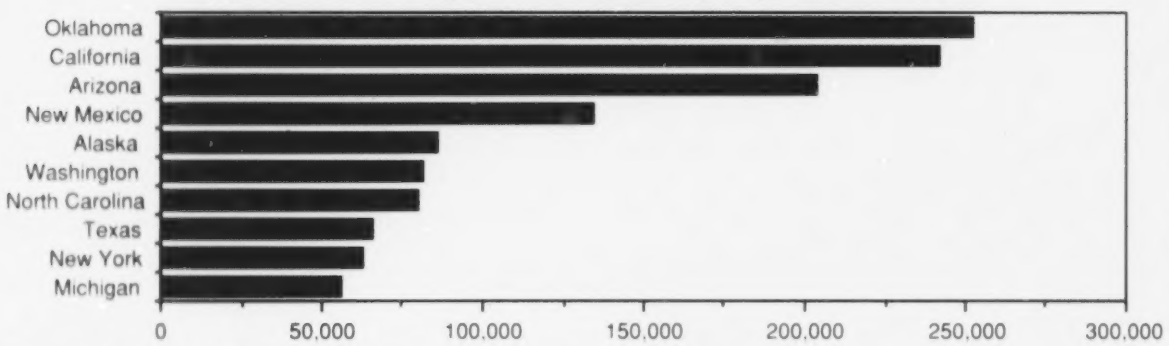
U.S. Population Estimates, 1980 and 1990

Race/Ethnicity	1980 Number	1980 Percent	1990 Number	1990 Percent	Percentage Growth
Total U.S. Population	227,757,000	100.0%	248,709,873	100.0%	9.2%
White	195,571,000	85.9%	199,686,070	80.3%	2.1%
African American	26,903,000	11.8%	29,986,060	12.1%	11.5%
Asian American	3,834,000	1.7%	7,273,662	2.9%	89.7%
Hispanic Origin*	14,608,673	6.4%	22,354,059	9.0%	53.0%
American Indian	**1,420,400**	**0.6%**	**1,959,234**	**0.9%**	**37.9%**

*Persons of Hispanic origin may be of any race.
Note: The 1990 figures have not been statistically adjusted to account for persons who identified themselves as "other race."
Source: U.S. Bureau of the Census, Preliminary Population Estimates, unpublished data, 1991.

Figure 1

States with the Largest American Indian Populations, 1990



Source: U.S. Bureau of the Census, Preliminary Population Estimates, unpublished data, 1991.

— Only 38 percent of Lumbee tribe members 25 years and older had a high school diploma or equivalent in 1980, and only 7 percent had four or more years of college. Similarly, just 40 percent of Navajo individuals finished high school, and only 4 percent had four or more years of college.

— In comparison, 60 percent of Creek and Choctaw individuals completed high school. For college completion rates, the respective figures were 11 percent and 10 percent of Creek and Choctaw adults.[2]

Pre-college Indicators

ELEMENTARY AND SECONDARY ENROLLMENTS

- In 1989, approximately 380,000 American Indian students were enrolled in elementary and secondary schools. Some 85 to 90 percent of these students were educated in public schools; the rest attended schools operated by the Bureau of Indian Affairs, Indian contract schools, or private schools (National Advisory Council on Indian Education, 1990).
- American Indians represent only 1 percent of public school students nationwide; however, in Alaska, Oklahoma, and New Mexico, American Indians comprise at least 9 percent of public school enrollment (Indian Nations At Risk Task Force, 1991).
- In 1989, almost three-fourths (74 percent) of American Indian elementary and secondary students attended public schools in ten states: Oklahoma, Arizona, California, New Mexico, Alaska, Washington, North Carolina, Michigan, Minnesota, and Wisconsin.

AT-RISK CHARACTERISTICS

A 1988 survey found that American Indians represented 1.4 percent of the nation's eighth graders

(National Center for Education Statistics, 1990). American Indians were more likely than any other racial or ethnic group to be considered "at risk" students, as measured by: single parent family, low parent education, limited English proficiency, low family income, sibling dropout, and being home alone more than 3 hours on weekdays.

- Approximately one in three American Indian students reported two or more risk factors; single-parent and low-income families were the two mentioned most often.
- Thirty-one percent of American Indian eighth graders lived in single parent households, the highest percentage for any group other than African Americans (47 percent).
- American Indian and African American students were most likely to report family incomes of less than $15,000 (42 percent and 47 percent, respectively).
- Nearly 30 percent of American Indian eighth graders had repeated a year of school, the highest percentage of any racial/ethnic group.
- In both mathematics and reading, American Indians had the highest percentages of students performing at below basic proficiency levels (32 percent and 27 percent). They also had the lowest percentages of students at advanced levels for math and reading (5 percent and 15 percent).

PUBLIC HIGH SCHOOL GRADUATES

- After reaching a high of 18,010 graduates in 1988-89, the number of American Indians earning diplomas from public high schools dropped to 17,080 in 1990-91.
- According to estimates from the Western Interstate Commission for Higher Education (WICHE), the number of American Indian public high school graduates is projected to hover around 17,000 in the early 1990s, and then increase to 18,660 by 1994-95 (WICHE, 1991).[3]
- In 1991, American Indians represented approximately 1 percent of public high school graduates. In the West, the percentage was nearly 2 percent, while in the Northeast the figure was less than one half of one percent. According to WICHE estimates, these percentages have remained relatively constant since 1986-87, and are not projected to change through 1992-93.
- Of the 18,000 American Indian public high school graduates in 1988-89, half were from the western states.

Although estimates vary, most research shows that American Indians have higher dropout rates than other racial and ethnic groups.

- In 1988, the high school dropout rate for American Indians was 36 percent, compared with 29 percent for all students, according to NCES.[4]
- One survey of tribal leaders estimated that 52 percent of American Indian students who enter high school graduate, and tribal leaders report that this figure remained relatively constant over the past five years (Wells, 1991). Another report hypothesized that dropout rates are also high for American Indians attending urban schools. For instance, the dropout rate is estimated to be as high as 51 percent for American Indians in the Los Angeles Unified School District (National Education Association, 1991).

PLANS FOR POSTSECONDARY EDUCATION

- Only 17 percent of American Indian eighth graders planned on taking a college preparatory program in high school, compared to 37 percent of Asians, 31 percent of whites, 25 percent of African Americans, and 23 percent of Hispanics (NCES, 1990).
- Only one-third (34 percent) of American Indian eighth graders expected to finish college, compared with 33 percent for Hispanics, 45 percent for whites, 39 percent of African Americans and 37 percent of Asian Americans.
- American Indian eighth graders were the least likely (17 percent) to plan to attend graduate school, contrasted to 38 percent of Asian Americans, 24 percent of African Americans, 22 percent of whites, and 21 percent of Hispanics.

SAT AND ACT SCORES

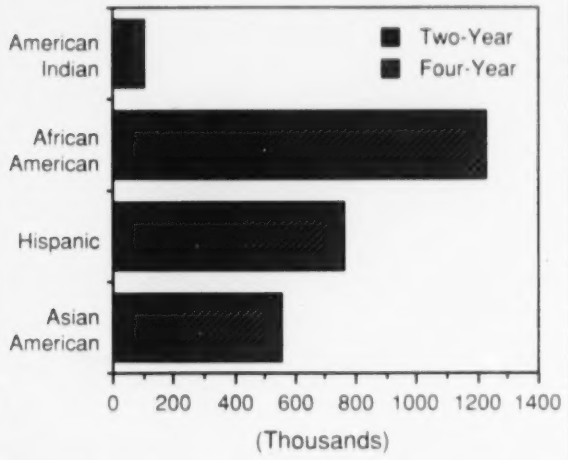
- During 1990, approximately 20,000 American Indians took college entrance exams. Fifty-four percent took the Scholastic Aptitude Test (SAT) and 46 percent took the American College Testing (ACT) program.
  - — The mean SAT scores for American Indians were 388-verbal and 437-mathematical; on the ACT the average score was 18. This compares with the national mean scores of 424-verbal and 476-mathematical; 20.6 was the average ACT score.

Postsecondary Enrollment

- In 1990, a total of 103,000 American Indian students enrolled in higher education, an 11-percent increase from 93,000 in 1988, and a 36-percent increase from 76,000 in 1976 (Carter and Wilson, 1992; Center for Education Statistics, 1987).

Figure 2

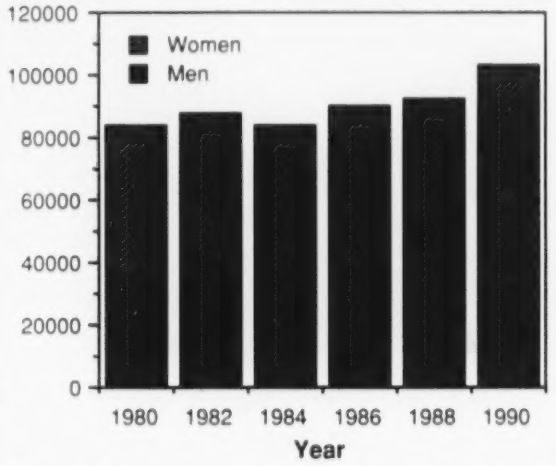
Enrollment in Two-Year and Four-Year Institutions by Race/Ethnicity, 1990



Source: U.S. Department of Education, National Center for Education Statistics, *Trends in Racial/Ethnic Enrollment in Higher Education: Fall 1980 to Fall 1990*. Washington D.C.: U.S. Department of Education, 1991.

Figure 3

American Indian Enrollment, by Gender, 1980 to 1990



Source: U.S. Department of Education, National Center for Education Statistics, *Trends in Racial/Ethnic Enrollment in Higher Education: Fall 1980 to Fall 1990*. Washington D.C.: U.S. Department of Education, 1991.

- However, during the decade 1980 to 1990, American Indians did not make any gains in their proportional enrollment in higher education: they still account for less than one percent (.8 percent) of all students.
- American Indian students are more likely than any other racial/ethnic group to attend public colleges or universities. In 1990, 88 percent of Indian students enrolled in public institutions, compared with 78 percent of all students and 81 percent of all minority students.
- American Indian students are also concentrated in two-year institutions: more than half (53 percent) enrolled at two-year colleges in 1990. Only Hispanic students — at 55 percent — had a higher proportion of students attending two-year colleges (figure 2).
- This concentration may be partially explained by the expanding enrollments of the 26 tribal colleges, of which 23 are two-year institutions (see box, p. 8). In 1991, about 14 percent of all American Indian students were enrolled in these colleges.
- American Indian students are more likely to attend college on a part-time basis.
  - In 1990, 47 percent of American Indian students were enrolled part time, compared with 43 percent of all students (NCES, 1991a).
  - The proportion of American Indian students attending on a part-time basis has increased sizably from 38 percent in 1976 (CES, 1987).

Similar to trends for all college students, American Indian women now outnumber American Indian men.

- In 1990, almost six in ten (58 percent) American Indian students attending college were women, while women represented only 45 percent of all American Indian students in 1980 (figure 3).
- Yet both American Indian men and women have recorded impressive enrollment gains: women's numbers increased 13 percent from 1988 to 1990 (53,000 to 60,000), and men's enrollment rose 10 percent from 1988 to 1990 (39,000 to 43,000).
- From 1976 to 1990, American Indian enrollment in graduate programs increased 54 percent, from 3,800 to just under 6,000.
- American Indians' enrollment in first professional programs decreased by 20 percent from 1,200 in 1976 to 1,000 in 1990. Yet this is a 9-percent increase from the low level of 900 in 1980.

American Indian college students are clustered in a few states, similar to the patterns found in the overall American Indian population.

- In 1990, 51 percent of American Indian students enrolled in colleges in six states, and 62 percent of Indian students were concentrated in ten states.
- In 1990, one in five American Indian students (more than 21,000) attended colleges and uni-

versities in California, the largest number in any one state.

Several studies show that most American Indian students attend a small number of institutions.

- Almost 75 percent of American Indian students attend a group of 79 institutions (Wells, 1989).
- In 1987, only seven four-year institutions had more than 500 American Indians in attendance (Tierney, 1992).
- In 1984, more than 35 percent of all postsecondary institutions had *no* American Indian students enrolled in their college (Center for Education Statistics, 1987).

Very little data exist on retention and degree completion rates for American Indian students. The number of Indian students in *High School and Beyond*, the national longitudinal survey on retention and degree completion conducted by NCES, was too small to be reliable. However, a few studies indicate that most colleges and universities are not succeeding in retaining these students.

- In a survey of 79 institutions with at least a 4 percent enrollment of American Indian students, Wells (1989) found that more than half (53 percent) of American Indian students left after the first year, and three out of four American Indian students did not complete their degrees.
- A recent survey of almost 300 colleges and universities found that 29 percent of American Indian students who were first-time, full-time freshmen in 1984 had graduated by fall 1990, compared with 53 percent of all students. Comparable figures for other groups were as follows: 62 percent for Asian Americans, 31 percent for African Americans, 40 percent for Hispanics, and 56 percent for whites (National Collegiate Athletic Association, 1992).

Financial Aid

UNDERGRADUATE SUPPORT

- In 1987, half (51 percent) of all American Indian undergraduates received no financial support from any source, according to the National Postsecondary Student Aid Study (NCES, 1988).[5] This is slightly lower than the proportion of all students (55 percent).
- Of American Indian students receiving aid, most received financial support from state (16 percent) and federal programs (41 percent).[6] Of all students, 15 percent received state aid, and 35 percent received federal aid.
- Only 10 percent of American Indians received institutional aid, compared with 14 percent of all students. (This may be related to the high proportion of American Indians attending two-year colleges, which typically offer little institutional aid.)
- American Indian undergraduates are somewhat less likely to take out loans to finance their education: 20 percent, compared with 24 percent of all students. And Indian students are somewhat more likely to receive grants (41 percent vs. 38 percent overall).
- A higher proportion of American Indian undergraduates received Pell Grants than any other racial/ethnic group, with the exception of African Americans: 30 percent of American Indians were awarded Pell Grants, compared with 40 percent of African Americans, and 18 percent of all students.

Several federal and state programs provide financial aid sources for American Indian students.

- One of the largest of these programs is the Higher Education Scholarship program administered by the federal government's Bureau of Indian Affairs (BIA).
  - In 1991, this program served 13,700 American Indian students, providing an average grant of $1,680. Yet these figures have dropped since 1987, when 15,200 American Indian students received an average award of $1,800 (BIA, 1992).
  - BIA reported there is a waiting list of 66,500 students for the program.

AT THE DOCTORAL LEVEL

The *Survey of Earned Doctorates*, published annually by the National Research Council (NRC), provides a rich source of data on American Indian doctorates, including information on how students finance their educations.

- In 1990, NRC found that 60 percent of American Indian doctorate recipients used personal resources, including loans, as the primary source of support for their education. Institutional aid was mentioned as the main support by 20 percent of American Indian students, and federal support was indicated as the primary support source by 11 percent.
- American Indians were the least likely minority group to claim institutional support as their primary source. Furthermore, American Indians and African Americans were the groups most likely to rely primarily on personal support.

- American Indians were the most likely of all racial/ethnic groups to complete their doctorate degrees without debt. Forty-six percent of American Indians, 44 percent of whites and Asians, 38 percent of African Americans, and 31 percent of Hispanics earned their Ph.D.s debt-free.

Conferred Degrees

OVERALL TRENDS

- American Indians received less than one percent of all associate degrees awarded in 1989. They earned .4 percent of bachelor's, master's, and first professional degrees, and .2 percent of all doctorate degrees.
- Women earned more than 55 percent of associate, bachelor's, and master's degrees awarded to American Indians in 1989 (figure 4). American Indian men continued to receive the majority of doctoral and professional degrees in that year, 52 percent of Ph.D.s and 56 percent of professional degrees.

ASSOCIATE DEGREES

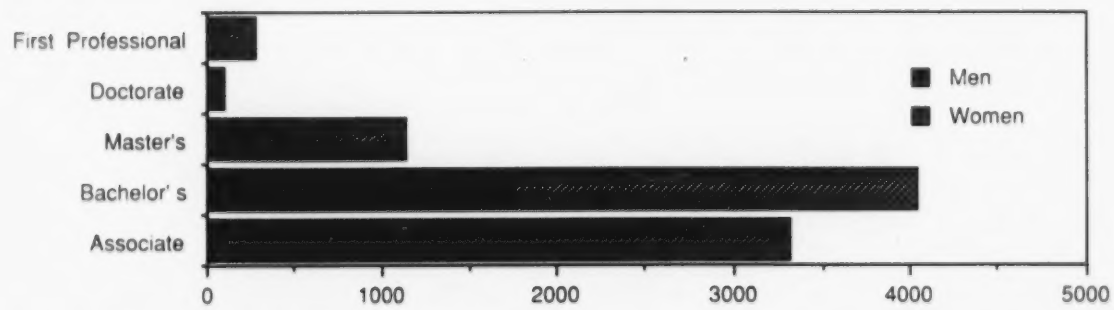
- Of the 429,946 associate degrees awarded in 1989, American Indians earned 3,318; of those, American Indian women earned 60 percent. The most common fields of study were, in descending order: liberal/general studies, business and management, health professions, and engineering.
- In 1989, the number of associate degrees awarded to American Indians in liberal/general studies jumped to 908, compared with 813 in 1987. Other than this change and slight drops in business and management, fine arts, and applied arts degrees, there was little change in the number and pattern of associate degrees awarded between 1987 and 1989.

BACHELOR'S DEGREES

- American Indians earned 4,046 bachelor's degrees in 1989, a 2-percent gain over 1987 and a 16-percent increase from 1976. This growth basically parallels the increases for the overall population, with the 1,015,290 bachelor's degrees awarded in 1989 representing a 2-percent gain from 1987 and an 11-percent gain from 1976.
- American Indian and African American men were the only two groups to experience overall decreases in the numbers of bachelor's degrees awarded from 1987 to 1989. Figures dropped 3 percent for American Indian males and 1 percent for African American males.
- During the period 1976 to 1989, American Indians consistently earned .4 percent of bachelor's degrees awarded by institutions of higher education.
- In 1989, bachelor's degrees granted to American Indians were concentrated in the fields of: business (20 percent), education (13 percent), social sciences (11 percent), engineering (7 percent), health sciences (6 percent), and psychology (5 percent).
  - —The three most common degrees for American Indian women were business, education, and social sciences; while for American Indian men they were business, social sciences, and engineering.

Figure 4

Degrees Earned by American Indians, 1989



Source: U.S. Department of Education, National Center for Education Statistics, *Race/Ethnicity Trends in Degrees Conferred by Institutions of Higher Education: 1978-79 through 1988-89*. Washington D.C.: Office of Educational Research and Improvement, 1991.

Tribally Controlled Community Colleges

In the 1991 academic year, 13,800 students enrolled in the 23 two-year and three four-year institutions known as Tribally Controlled Community Colleges. This represents 14 percent of the American Indian higher education enrollment.

As Ernest Boyer, president of the Carnegie Foundation for the Advancement of Teaching, notes, "Viewed by the numbers alone, tribal colleges add up to only a small fraction of the total higher education picture — the equivalent perhaps of a small branch of a single state university. But using conventional yardsticks to measure these colleges misses the significance of their work. [They] can be understood only in the historical context of Indian education and the spiritual role they play in bringing renewal to their people."[7]

Most of the colleges were formed when tribal leaders became frustrated watching too few of their young people succeed in traditionally white institutions of higher education.

In 1972, the American Indian Higher Education Consortium (AIHEC) was founded by six tribally controlled colleges to promote and represent these colleges' interests. Today, the consortium consists of 26 U.S. institutions (including two that are sponsored by the U.S. Department of the Interior) and two Canadian institutions. Nineteen of the U.S. colleges are fully accredited, and six are candidates for accreditation.

By integrating tribal languages and history into a traditional college curriculum, tribal leaders sought to provide their members with a postsecondary education that would reinforce tribal culture and identity, and offer students job skills (Mohatt, 1990). Although not seen as a primary goal, tribal leaders also thought the colleges could prepare those students who are interested in transferring to a four-year institution.

The tribal colleges are very different from most other institutions of higher education (figure 5).

- Most (77 percent) are less than two decades old. (Navajo Community College, the first tribal college, was established in 1968.)
- Most have relatively small student bodies, enrolling fewer than 500 students.
- With the exception of four institutions, all are located on Indian reservations. Proximity appears to part of these institutions' appeal; in one survey of students from Montana's tribal colleges, 75 percent said that the close location was either "extremely important" or "somewhat important" in their decision to attend college.[8]
  - —The colleges are serving a population that has not traditionally enrolled in higher education. One scholar noted that Montana has doubled its number of American Indian students through the enrollments at tribal colleges; these students were not recruited away from other institutions.[9]
- Due to their location on reservations, these colleges are unlike most community colleges in that they do not have a tax base; they rely primarily on federal funds (provided through the Tribally Controlled Community College Act) to meet their operating costs. Since 1989, funds raised by the American Indian College Fund have supplemented federal funding, and are primarily used to build an endowment for the colleges, provide scholarships, buy equipment, and improve facilities.

Tribal colleges have experienced dramatic enrollment gains over the past decade.

- —In 1982, the enrollment of American Indians at tribal colleges equalled 2,094. By 1991, the colleges had almost seven times as many students, with enrollment reaching 13,800 (AIHEC, 1992).
- —From 1991 to 1992 alone, the colleges recorded a 20-percent full-time equivalent enrollment increase in American Indian students, from 5,000 to 6,024.
- —The colleges have gained sizable increases in federal appropriations, though funding has not kept pace with the enormous enrollment increases experienced by the colleges. Federal expenditures per student fell from $3,000 per student in 1980 to $2,672 per student in 1991 (AIHEC, 1992). This compares with an average expenditure of $5,129 per student for all public two-year colleges.

Unfortunately, transfer rates and comprehensive information on the articulation agreements established between tribal colleges and neighboring predominantly white four-year institutions are not available. However, AIHEC officials note that many of the tribal colleges have worked with local four-year institutions to ensure that courses are comparable and that transferring goes as smoothly as possible.

Tribal college presidents expect that the number of tribal colleges will continue to grow, as other tribes look toward the success of the existing colleges as a model. The consortium notes that a number of tribal leaders are interested and involved in establishing colleges for their own tribes.

Figure 5

Tribally Controlled Community Colleges

Name	Location	Year Established	Accreditation Status	Enrollment (1991)
1. Bay Mills Community College	Brimley, MI	1984	Fully Accredited	250
2. Blackfeet Community College	Browning, MT	1974	Fully Accredited	350
3. Cheyenne River Community College	Eagle Butte, S.D.	1974	Seeking Candidacy	270
4. Crownpoint Institute of Technology	Crownpoint, N.M.	1979	Fully Accredited	125
5. D-Q University [a]	Davis, CA	1971	Fully Accredited	171
6. Dull Knife Memorial College	Lame Deer, MT	1975	Candidate	184
7. Fond du Lac Community College	Cloquet, MN	1979	Affiliated w/ another institution	500
8. Fort Belknap Community College	Harlem, MT	1985	Candidate	140
9. Fort Berthold Community College	New Town, N.D.	1973	Fully Accredited	185
10. Fort Peck Community College	Poplar, MT	1978	Fully Accredited	290
11. Haskell Indian Jr. College [a, b]	Lawrence, KS	1970	Fully Accredited	831
12. LacCourte Oreilles Ojibwa Community College	Hayward, WI	1975	Candidate	299
13. Little Big Horn Community College	Crow Agency, MT	1980	Fully Accredited	170
14. Little Hoop Community College	Fort Totten, N.D.	1974	Fully Accredited	218
15. Navajo Community College	Tsaile, AZ	1968	Fully Accredited	1800
16. Nebraska Indian Community College	Winnebago, NE	1979	Fully Accredited	219
17. Northwest Indian Cc ege	Bellingham, WA	1979	Candidate	1981
18. Oglala Lakota College	Kyle, S.D.	1971	Fully Accredited	1059
19. Salish Kootenai College	Pablo, MT	1977	Fully Accredited	798
20. Sinte Gleska University	Rosebud, S.D.	1970	Fully Accredited	1519
21. Sisseton Wahpeton Community College	Sisseton, S.D.	1979	Fully Accredited	138
22. Southwestern Indian Polytechnic Institute [a, b]	Albuquerque, N.M.	1971	Fully Accredited	1260
23. Standing Rock College	Fort Yates, N.D.	1971	Fully Accredited	250
24. Stone Child Community College	Box Elder, MT	1984	Candidate	132
25. Turtle Mountain Community College	Belcourt, N.D.	1972	Fully Accredited	401
26. United Tribes Technical College [c]	Bismarck, N.D.	1969	Fully Accredited	308

[a] Not located on a reservation
[b] Established and operated by the Bureau of Indian Affairs
[c] Not located on a reservation, does not receive funds under the Tribally Controlled Community College Assistance Act

Note: In addition, two Canadian institutions are members of the American Indian Higher Education Consortium: Saskatchewan Indian Federated College in Saskatchewan, Canada, and Red Crow Community College in Cardston, Alberta.

Source: American Indian Higher Education Consortium, unpublished tabulations, 1992.

MASTER'S DEGREES

- Master's degrees were awarded to 1,133 American Indians in 1989, a 3-percent increase from 1,104 in 1987 and a 45-percent increase from 783 in 1976. This pattern contrasts with the overall number of master's degrees, which peaked at 317,000 in 1977, dropped below the 300,000-mark during the early 1980s, and then increased steadily since 1985 to reach 309,000 in 1989.
- One in three master's degrees conferred to American Indians was in education. Business and health sciences also comprised significant portions of degrees — 17 percent and 8 percent, respectively.
- American Indian men were equally likely to obtain a master's degree in either business or education; however, women were more than three times as likely to receive a master's degree in education than in business.
- In 1989, approximately .4 percent of all degrees granted at the master's level were granted to American Indians, the same percentage earned since 1981. During the same period, percentages of master's degrees earned by Asian Americans and Hispanics increased, and the percentages received by whites and African Americans decreased.

FIRST PROFESSIONAL DEGREES

- In 1989, American Indians received 268 first-professional degrees — a 12-percent decrease from 304 degrees in 1987, and a 42-percent increase from 189 degrees in 1976. The overall number of first-professional degrees hovered around 71,000 through most of the 1980s, and dropped slightly (1.2 percent) from 71,617 in 1987 to 70,758 in 1989.
- More than half (54 percent) of the first-professional degrees awarded to Native Americans were in the field of law; 23 percent were in medicine.
- Forty-four percent of first-professional degrees granted to American Indians went to women in 1989, a dramatic increase from the 29 percent women earned in 1985.

DOCTORATES

- In 1991, American Indians earned 128, or .5 percent, of the 24,721 doctorate degrees awarded to U.S. citizens.[10] This represented a 33-percent increase from the 93 Ph.D.s earned by American Indians in 1990, and a 51-percent increase from the 85 Ph.D.s awarded in 1981.
- Of American Indian doctorates in 1990, education was by far the most popular field — 39 percent of American Indian doctorates were in this field. Another 25 percent were in the social sciences. In 1975, these figures were 44 percent and 22 percent, respectively.
- While men still outnumber women in Ph.D. attainment, women of all races/ethnicities have made sizable gains in both the numbers and percentages of earned doctorates. American Indian women increased the number of Ph.D.s they earned annually from 9 to 45 between 1975 and 1990, and they now represent almost half (48 percent) of American Indian doctorate recipients, up from 25 percent in 1975.

Demographic Profile of American Indian Doctorates

- According to NRC, the median age at which American Indians received their doctorates was 38 years, compared with 34 years for all doctorates combined.
- Furthermore, American Indians and African Americans had the longest total time lapse from baccalaureate to doctorate, 14 years versus 10 years for the overall pool.
- From 1975 to 1990, time-to-degree increased the most among American Indians and African Americans, both in TTD (total time elapsed between the baccalaureate and doctorate) and RTD (time registered in school between the two degrees).
  - A strong correlation exists between field of study and time-to-degree; shortest times-to-degree are found in the sciences, fields with the fewest American Indians and African Americans. When fields were disaggregated, American Indians and African Americans still had slightly longer TTDs; however, RTD differences among racial/ethnic groups all but disappeared in the fields of physical sciences, engineering, life sciences, and education.
- Fifty-four percent of 1990 American Indian Ph.D. recipients reported having at least one parent with some college education. This is up from 39 percent in 1975. Still, one fifth of American Indian doctorates surveyed in 1990 indicated their parents had not finished high school.

NRC data show that those institutions granting large numbers of baccalaureate and doctorate degrees to particular minority groups are located in states with large proportions of those same minority racial/ethnic groups. Not surprisingly then, universities in Oklahoma, Washington, California, and Michigan produce the highest numbers of American Indian doctoral recipients.

- Between 1986 and 1990, Oklahoma State University, University of Oklahoma, University of Washington, and Michigan State University were the four top institutions conferring Ph.D.s on American Indians.
- Between 1986 and 1990, Northeastern State University (OK), University of Wisconsin-Madison,[11] University of Oklahoma, and University of California-Berkeley were the top four baccalaureate institutions whose American Indian graduates went on to earn a Ph.D.

Academe continues to be the largest employer of American Indian Ph.D.s, yet this pattern has fluctuated somewhat. In both 1975 and 1990, two-thirds (67 percent) of American Indian doctorates reported postdoctoral commitments for academic posts; however, in 1980, only 48 percent of American Indian Ph.D.s reported academic employment.

Employment in Higher Education

OVERALL PATTERNS

The primary source of data on American Indian employment is the Higher Education Staff Information survey, conducted biannually by the Equal Employment Opportunity Commission (EEOC). Unfortunately, little information is available on the discipline fields of American Indian faculty. EEOC data show little progress was made during the 1980s in increasing the number of American Indians on college and university staff.

- In 1979, 0.3 percent of all full-time higher education employees were American Indian; that percentage barely budged to 0.4 percent in 1989 (table 2).
- Almost 75 percent of all American Indian higher education employees were in nonfaculty and nonmanagement positions.

FACULTY

- American Indians' representation among full-time faculty remains minute— 0.3 percent in 1989. This means that only one in every 344 full-time faculty is American Indian.
- Similar to trends for all college faculty, American Indian men outnumber women by two to one.
- From 1979 to 1989, the number of American Indian full-time faculty increased by 42 percent (from 1,056 to 1,498); yet their representation among full-time faculty remained stagnant (.2 percent in 1979 and .3 percent in 1989).
- In 1989, more than half (53 percent) of American Indian faculty were employed by public four-year institutions (Higher Education Research Institute, 1991). Another 30 percent were employed by public two-year institutions; while 17 percent were employed by independent institutions (primarily four-year).
- It is estimated that about 20 to 25 percent of American Indian faculty in two-year colleges are employed in the 23 two-year tribal colleges.[12]

Table 2

A Snapshot of American Indians Employed in Higher Educaiton

	Number	% of Total
Full-Time Employees, Total		
Total	7,849	0.4%
Men	3,713	0.2%
Women	4,136	0.2%
Full-Time Faculty		
Total	1,498	0.3%
Men	986	0.2%
Women	512	0.1%
Part-Time Faculty		
Total	1,122	0.4%
Men	653	0.2%
Women	469	0.2%
Full-Time Administrators		
Total	491	0.4%
Men	289	0.2%
Women	202	0.1%
Other Full-Time Employees		
Total	5,860	0.5%
Men	2,438	0.2%
Women	3,422	0.3%

Source: Carter, Deborah J. and Reginald Wilson. *Minorities in Higher Education 1991: Tenth Annual Status Report* (Washington, D.C.: American Council on Education, 1992).

American Indian faculty held tenure at a rate slightly lower than the average in 1989.

- According to EEOC data, 67 percent of American Indian faculty were tenured, compared with 71 percent of all faculty.
- Yet there were sizable differences by gender. The tenure rate for American Indian men was 71 percent; the rate for women was 57 percent.

American Indian faculty, similar to most other minority faculty, were concentrated in the lower ranks, according to EEOC.

- Fewer than one in five full-time faculty who were American Indian were full professors.
- More than two out of five American Indian faculty have the rank of instructor or lecturer.

ADMINISTRATION AND MANAGEMENT

- Only 491 (0.4 percent) of full-time administrators in higher education were American Indian in 1989; this is a slight increase from 330 (0.3 percent) in 1979.
- American Indian men continue to outnumber women in administrative and management posts — 289 to 202 — but this disparity has declined dramatically since 1979, when the ratio was 241 to 89.
- An estimated 20 to 30 college presidents are American Indian, and most of these presidents head tribal colleges (American Council on Education, 1991).

IMPLICATIONS

The American Indian population is young and growing at a fast pace. With its increased access to postsecondary education through tribally controlled community colleges, this is a population that higher education officials would do well to recruit (see box, page 8). Although American Indians have recorded impressive gains in enrollment and earned degrees at all levels over the last decade, their overall representation among students and graduates has not increased sizably. This may be due to low retention rates for American Indian students: research indicates that three of every four American Indian students leave college without completing a bachelor's degree. Furthermore, with American Indians concentrated in two-year institutions, colleges and universities should consider examining their articulation agreements with local two-year colleges to find better ways to ensure that American Indian students are able to transfer as smoothly as possible.

Colleges and universities might consider changes that would improve the campus climate for American Indian students. Since research shows half of all American Indian students drop out or stop out in their first year of college, programs that specifically target American Indian students in the first year are essential, and could dramatically improve their chances of remaining in college. Mentoring programs that pair American Indian students with faculty, staff or older students could facilitate their transition to collegiate life and combat problems such as isolation, homesickness, and poor academic preparation.

Colleges and universities might also look to the success of the tribal colleges — which many claim is due to their emphasis on tribal culture and language development — for examples of how to improve the campus climate for American Indian students and increase their retention rates. In general, predominantly white institutions should collaborate more with tribal colleges.

Some have suggested that college and university faculty and administrators should visit Indian reservations in their region to learn more about Indian cultures and understand their effect on American Indian education. For example, most tribes do not place a high value on competition focused on individual achievement, so American Indian students may be put off by the competitive nature of most higher education institutions. In addition, because of the social and economic problems prevalent on many reservations (unemployment, substance abuse, high suicide rates, etc.) higher education officials and policy makers must first recognize and address the need to strengthen "the physical, mental and spiritual health of Natives," before the nation can work to improve American Indians' educational status.[13]

The high dropout rates for American Indian students at the high school level indicates that colleges and universities should collaborate with elementary and secondary schools to encourage more Indian students to complete high school and plan for postsecondary education. Higher education institutions could also work with other outreach efforts, such as the programs offered by the American Indian Science and Engineering Society.

American Indian students and leaders themselves are increasingly organizing on predominantly white campuses; examples include the American Indian Student Association at Pennsylvania State University and the Keepers of the Fire organization at the University of Wyoming. Colleges and universities might want to support the formation of such groups. As the number of such groups grows, they can help increase awareness of American Indian issues and will offer their institutions concrete opportunities for improving the campus climate for American Indians.

Although the number of American Indian faculty has grown, these faculty have not achieved the same tenure rates as other groups. Colleges and universities should examine their recruitment, tenure, and promotion practices to identify the causes for the low tenure rates of American Indian faculty (especially women, whose appointment and tenure rates are disproportionately low), their concentration in non-tenure track positions, and their vast underrepresentation among higher education administrators.

The attainment of postsecondary education is very important to the American Indian community's goal of self-determination. One of every four jobs on Indian reservations is held by a non-Indian; most of these positions are professional jobs that require college degrees.[14] The control and management of natural resources on Indian lands is of particular importance, and American Indians need bachelor's and advanced degrees to help their people better manage these resources. (Programs

such as math and science camps offered by the American Indian Science and Engineering Society are greatly increasing the pool of American Indian students who can succeed in college, and can serve as a model for the sorts of positive initiatives needed.)

Increasing the number of college-educated American Indians may also help the leaders of this population more effectively advocate for their people. In 1990, American Indians represented less than 2 percent of the population in 37 states, and as the competition for scarce state resources intensifies, it "may be very difficult for governors and other state legislators to reconcile [attention to Indian issues] when the American Indians represent such a small part of the state pie" (Hodgkinson et al., 1991).

With respect to research on American Indians in higher education, a major problem is the paucity of national studies examining their experiences — researchers all too often ignore American Indians or include them in an "other" category. Therefore, their educational needs and problems are unknown. This is not just a problem for education areas (such as projections for enrollment and degrees), but also in terms of economic indicators such as employment figures from the Bureau of Labor Statistics and workforce data from the Census bureau.

Data collection efforts by various agencies should consider oversampling to ensure that the American Indian population is studied in major research projects. This would definitely help higher education officials and policy makers form a clearer picture of how this small but important population fares in our colleges and universities.

A second research problem is that the few studies conducted almost always focus on American Indians as a group, not recognizing that almost 500 tribes are included in this category. Although little research has studied educational differences by tribes, Census data indicate that tribes vary widely in terms of educational attainment, average income levels, culture, and language spoken. Also, a research gap exists in terms of studying the differences in educational attainment between American Indians who live on reservations and those who do not.

Recognizing that collecting data on separate tribes may be difficult, it might be helpful to at least present data on American Indians by geographical region. Patterns might emerge at the regional level since cultural differences and socioeconomic differences are likely to be tied to regional characteristics.

The increasing involvement of American Indians in shaping their peoples' education has led to important changes at the postsecondary level. Tribally controlled community colleges, established over the past three decades, have enrolled a sizable proportion of the American Indian community — one that for the most part, had not participated in higher education previously. And the increases in enrollments and degrees conferred to American Indians over the past ten years are encouraging, given these hard economic times. American Indians' recent educational gains are especially impressive given the difficult economic and social conditions young American Indians face. The challenge predominantly white institutions now face is to work with American Indian communities and tribal colleges to build on these positive trends and learn how best to ensure that American Indians receive the quality and level of education they need.

ENDNOTES

[1] In this brief, the term "American Indian" is based on the racial classification definition used by the U.S. Census Bureau, and includes Native Alaskans.

[2] U.S. Census Bureau, *Characteristics of American Indians by Tribes and Selected Areas*, 1980, as cited in Hodgkinson, Harold, with Janice Outtz and Anita M. Obarakpor, *The Demographics of American Indians: One Percent of the People, Fifty Percent of the Diversity*, (Washington, D.C.: Center for Demographic Policy, Institute for Educational Leadership, 1990).

[3] Data on enrollments and high school graduates in non-public schools were not available from enough states for WICHE to generate projections.

[4] U.S. Department of Education, National Center for Education Statistics, *Dropout Rates in the United States*, 1988, as cited in Hodgkinson et al.

[5] The NPSAS study surveyed students who received aid, as well as those who did not.

[6] Students' responses to these categories were not mutually exclusive; that is, some received aid from the state *and* federal government, or received a grant *and* took out a loan, etc.

[7] Carnegie Foundation for the Advancement of Teaching. *Tribal Colleges*. Princeton, N.J.: Princeton University Press, 1989.

[8] Wright, Bobby, "An Assessment of Student Outcomes at Tribally Controlled Community Colleges, 1985-86," Presentation at the National In-

dian Education Association annual conference, November 22, 1986.

[9] Montana Higher Education Commission, "Internal Report on Total Enrollment in Montana, Fall Quarter," (1986), as cited by Patrick Weasel Head in O'Brien, Eileen M. "Tribal Colleges Thrive Amid Hardships," *Black Issues in Higher Education*, 7: 2 (March 29, 1990).

[10] The National Research Council has released some preliminary data on overall counts of doctorates in 1991. However, the Survey of Earned Doctorates, which includes information from states on field of concentration, time to degree, and other areas, will not be available until later this fall.

[11] Census figures also show Wisconsin as having a sizable American Indian population; its ranking is 14th among states in terms of the number of American Indians.

[12] Based on calculations from the American Indian Higher Education Consortium and the 1988 National Survey of Postsecondary Faculty.

[13] Indian Nations At Risk Task Force, U.S. Department of Education. *Indian Nations At Risk: An Educational Strategy for Action*. Washington, D.C.: U.S. Government Printing Office, 1991, p. 5.

[14] Hill, Norbert, "AISES: A College Prevention Program that Works," *Change* (March/April 1991): p. 25.

RESOURCES

1) The Office of Indian Education at the U.S. Department of Education administers some of the federal programs on Indian education (all levels), and collects data on these programs. For more information, contact the Office of Indian Education, U.S. Department of Education, 400 Maryland Ave. SW, Washington, D.C. 20202, (202) 401-1887.

2) The Office of Indian Education in the Bureau of Indian Affairs (U.S. Department of the Interior) also administers and collects data on federal programs for Indian education, including the Tribally Controlled Colleges Act. For more information, contact the Office of Indian Education, Bureau of Indian Affairs, U.S. Department of the Interior, 18th and C Streets NW, Washington, D.C. 20245, (202) 208-4871.

3) The National Advisory Council on Indian Education (NACIE) was established in 1973 under the Indian Education Act to advise the Secretary of Education on Indian education policy. NACIE publishes an annual report on American Indians in education (all levels). For more information, contact the National Advisory Council on Indian Education, 330 C Street NW, Washington, D.C. 20202, (202) 732-1353.

4) The American Indian Higher Education Consortium (AIHEC) represents 28 tribally controlled community colleges (including two Canadian institutions). AIHEC also operates a fund-raising branch known as the American Indian College Fund. For more information, contact the American Indian Higher Education Consortium, 513 Capitol Court NE, Suite 100, Washington, D.C. 20002, (202) 544-9289. AIHEC also publishes a quarterly journal, *Tribal College: The Journal of American Indian Higher Education*. For more information, contact Paul Boyer, Editor, *Tribal College*, P.O. Box 898, Chestertown, MD 21620-0898, (301) 778-0171.

5) The Census Bureau will be updating *We, the First Americans*, its report based on the 1980 Census, in 1993. Similar to the first report, *We, the First Americans* will offer educational attainment data, income data, geographic concentration pattern, etc., tribe by tribe. For more information, contact the Bureau of the Census, U.S. Department of Commerce, Washington, D.C. 20233, (301) 763-4100.

6) The Center for Indian Education at Arizona State University publishes a journal, maintains a national database on American Indian faculty, and hosts an annual conference for American Indian professors. The *Journal of American Indian Education* is published three times a year and covers all levels of education. The database is updated frequently, and contains information on most American Indian faculty in the U.S., including institutional affiliations, fields, tenure status, etc. Interested individuals may purchase lists from the database in diskette form (for the cost of postage and handling fees) or in hardcopy form (for $10). The Annual Conference of American Indian Professors (now in its third year) offers American Indian faculty an opportunity to network and discuss issues that are important to American Indian educators. For more information on the journal, the database or the conference, contact Karen Fisher, Director, Center for Indian Education, Arizona State University, Tempe, AZ 85287-1311, (602) 965-6292.

7) The American Indian Graduate Center (AIGC) offers scholarships to American Indian and Alaskan Native graduate students. The center also is undertaking a national project to track American Indian college students and graduates. Already, the project has collected data on more than 2,000 students and graduates from throughout the U.S., and hopes to have a comprehensive, national database on line within the next two years. The project is collecting data on fields of study, graduation rates, tribal affiliation, graduate school attendance, and other areas. For more information on the American Indian College Student Tracking Project or on the center's scholarships, con-

tact the American Indian Graduate Center, 4520 Montgomery Blvd. NE, Suite 1-B, Albuquerque, NM 87109, (505) 881-4584.

8) The American Indian Science and Engineering Society (AISES) supports educational and career opportunities for American Indian students in math, science and engineering through early intervention efforts. AISES conducts science and math workshops and camps, trains American Indian college students to mentor American Indian high school students, and offers and identifies scholarships for American Indian students. AISES also collects data on American Indian scientists and engineers and degree recipients in these fields. For more information, contact the American Indian Science and Engineering Society, 1630 30th Street, Suite 301, Boulder, CO 80301, (303) 492-8658.

9) The March/April 1991 issue of *Change: The Magazine of Higher Learning* was devoted to American Indian education issues. Titled "American Indian Voices in Higher Education," it focused on the history of American Indians in U.S. colleges and universities, Native American issues in the college curriculum, model programs, and offered suggestions for making campus climates more welcoming and encouraging toward Indian students. Copies of the issue are available for $7.50 each from *Change*, Heldref Publications, 4000 Albermarle Street NW, Washington, D.C. 20016, (800) 365-9753.

10) William G. Tierney, a professor at the Center for the Study of Higher Education at the Pennsylvania State University, recently completed a two-year, Ford Foundation-funded study of American Indians in college. The resulting report, *Official Encouragement, Institutional Discouragement: Minorities in Academe — The Native American Experience*, is a critical ethnography based on 200 interviews with administrators, faculty, staff, and students (primarily American Indians) at ten institutions located throughout the U.S. The report presents a rich portrait of American Indian students, focusing on undergraduate education, and it is available for $38.50 from the Ablex Publishing Corporation, 355 Chestnut St., Norwood, N.J. 07648.

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